

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO	Э.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,566		04/15/2004	Kazuaki Nagamatsu	04970/0201153-US0	9119
7278	7590	07/11/2005		EXAM	INER
DARBY	& DARI	BY P.C.	BOEHLER, ANNE MARIE M		
P.O. BOX				ARTIBUT	DADED MILADED
NEW YORK, NY 10150-5257				ARTUNII	PAPER NUMBER
				3611	
NEW YORK, NY 10150-5257				ART UNIT 3611	PAPER NUMBER

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/825,566	NAGAMATSU ET AL.				
Office Action Summary	Examiner	Art Unit				
	Anne Marie M. Boehler	3611				
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be to bly within the statutory minimum of thirty (30) da I will apply and will expire SIX (6) MONTHS fror the cause the application to become ABANDON	imely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	<u> </u>					
,	, 					
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 1-3 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☒ Claim(s) 1-3 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	awn from consideration.					
Application Papers						
9) The specification is objected to by the Examin		•				
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat* See the attached detailed Office action for a list	its have been received. Its have been received in Applicatority documents have been received in CPCT Rule 17.2(a)).	tion No red in this National Stage				
Attachment(s)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D					
3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date <u>4/15/04</u> .		Patent Application (PTO-152)				

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Onodera (USPN 6,237,713).

Onodera shows an electric power steering system including a first housing A with an integral fitting section 10 and a coaxial second housing B with a separate fitting section fixed by a separate member (see Figure 3). A steering shaft 2 is supported in the housings for axial movement. Nut member 19 is screwed onto a screw groove on an outer surface of the steering shaft through rolling members 31. A motor 1 drives the nut, which transfers motion to the steering shaft.

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng (USPN 6,155,376) in view of Onodera (USPN 6,155,376).

Cheng shows a power steering system with a first housing 58, a coaxial second housing 50, and a nut member 70 screw fit through rolling members 74 to a grooved outer surface of steering shaft 32. A motor 60 having a small gear 114 on its output shaft drives a large gear on the nut, which moves the steering shaft. A thrust bearing

Art Unit: 3611

76 is fixed in the first housing to prevent the nut from moving axially. The motor is connected to the second housing by a transmission housing 148. A projection 160 from the housing 148 extends loosely into a recess in the first housing and is held in place by a mesh adjusting section that changes the radial position of the transmission housing, and motor, relative to the first housing.

Cheng is silent regarding fixing sections on the first and second housings.

Onodera shows an electric power steering system including a first housing A with an integral fixing section 10 and a coaxial second housing B with a separate fixing section fixed by a separate member (see Figure 3).

It would have been obvious to one of ordinary skill in the art to provide the Cheng housing with an integral first fixing section and a separate member for attaching a second fixing section, as taught by Onodera, in order to securely and adaptably attach the housing to the vehicle.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cheng (USPN 6,164,407) shows a power steering motor with an adjustable motor.

Tatewaki, Iwasa, Sasaki, Oka, Homaga and Tatewaki show electric power steering systems.

Iwasaki, Ishimaru, Tsutsui, and Takaoka each show a steering system with adjustably meshing gears.

Art Unit: 3611

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne Marie M. Boehler whose telephone number is 571-272-6641. The examiner can normally be reached on 7:30-5:00, Monday-Thursday, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 571-272-6612. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anne Marie M Boehler Primary Examiner

7/6/05

Page 4

Art Unit 3611

amb